report refer to permanent wage changes, and the use of income and substitution effects explains why these estimated elasticities are somewhat negative. The impact of SFAS 106 on the GNP-PI is larger for higher labor supply elasticities, and the labor supply elasticity was set to zero in the baseline calculation to guard against understating the impact on the GNP-PI.

γ, which is the share of nominal expenditure devoted to produced goods: Given the calibration of the other parameters of the model, the value of γ does not affect the calculated effects of SFAS 106 on GNP-PI or the wage rate. As explained in Part II of Appendix C of the Godwins report, the model is calibrated so that in the absence of SFAS 106, prices in all sectors and the GNP-PI are normalized to equal 1.0. With this normalization, the value of γ becomes completely irrelevant to the numerical results of the model.

ϕ, which measures the disutility of labor: With the specification of the utility function in equation (A1) in Appendix C of the Godwins report, the labor supply curve has a constant elasticity with respect to the real wage. With a constant elasticity with respect to the real wage, the labor supply curve depends on only two parameters: the elasticity of labor supply and a location parameter. The elasticity of labor supply has already been discussed. The location parameter was chosen to make labor supply equal to labor demand as indicated in equation (B9) in Part II of Appendix C in the Godwins report. Given the labor supply elasticity and the location parameter, the numerical value of the parameter ϕ is irrelevant.

The production function contains the following parameters:

ρ_1 and ρ_2, which are the shares of labor cost in value added in sectors 1 and 2 respectively: In the baseline calculations, each of these parameters is set equal to 0.64 which is the share of labor cost in value added for the U.S. economy as a whole.

A_1 and A_2, which are productivity parameters in sectors 1 and 2 respectively: These parameters affect the demand for labor in each sector. They are calibrated so that when labor supply equals labor demand, 68% of the labor force is employed in sector 1 and 32% of the labor force is employed in sector 2. The details of this calibration are contained in Part II of Appendix C, pp. 58-59.

Response to request (2): provide the same information as in (1) for any alternate functional forms that were used.

Experimentation with different functional forms and different parameter values involves a fundamental tension. On the one hand,

experimentation with different functional forms and different parameter values offers the benefit of learning how robust the results are to various changes in the model. On the other hand, experimentation may allow the researcher to go on a "fishing expedition", fishing for the functional forms and parameter values that deliver the most pleasing result. We tried to strike the appropriate balance by not experimenting with functional forms (except as described below) and by reporting the results of experimentation with parameter values in the sensitivity analysis.

The only change in the model that might be construed as a change in functional form occurred while the model was in a developmental stage before Godwins was engaged by USTA. In the developmental stage, the original (simpler) functional form for labor supply assumed that the labor supply elasticity must be zero. However, we modified the labor supply function to its current form to allow the labor supply elasticity to be either zero or nonzero. In a sense, this change was not really a change in functional form because the original labor supply function is a special case of the labor supply function used in the Godwins report. The baseline calculations use a value of zero for the labor supply elasticity, but we decided to allow for nonzero labor supply elasticities so that we could perform a sensitivity analysis on the labor supply elasticity. The results of the sensitivity analysis are reported in section IV of the Godwins report.

The functional form used for the production functions is the Cobb-Douglas production function. This functional form is perhaps the most widely used functional form for production functions.

The functional form of the utility function was chosen so that the elasticity of labor supply and the price elasticity of demand for each good are all constant. Various constant values of these elasticities were used in the sensitivity analysis. The functional form of the utility function was also chosen to incorporate the effects on demand of the aggregate price level as well as the individual sector prices.

Response to request (3): provide the data used to estimate the model.

As explained above, the model used in the Godwins report is not an econometric model. The choice of values for various parameters was described in response to request (1).

Response to request (4): provide the data used in making forecasts from the model.

Conventional large-scale commercial econometric models are frequently used to make short-run macroeconomic forecasts of a variety of macroeconomic variables. The forecasts are *conditional* forecasts which means that the forecasts depend on the assumed future values of various input variables to the model. For such models, it is important to examine the data used in making forecasts from the model as well as

summary statistics describing historical forecast accuracy (which is related to request (1c) above).

The macroeconomic model in the Godwins report is not a conventional short-run forecasting model. The only additional data that is used to calculate the macroeconomic effects of the introduction of SFAS 106 is the direct percentage increase in labor costs for firms in sector 2. In the baseline calculations a value of 3% is used for the direct percentage increase in labor costs for firms in sector 2. In the sensitivity analysis values of 2% and 5% are also used.

Summary statistics are often used to gauge the forecasting accuracy of conventional short-run econometric forecasting models, but such statistics are not appropriate in the case of the macroeconomic model used in the Godwins report. Short-run econometric forecasting models produce forecasts of a variety of economic variables and, after the fact, the accuracy or forecast error of each forecast can be evaluated. For instance, a model could be used in 1992 to forecast GNP-PI in 1993. Then after we learn what the actual value of GNP-PI turns out to be in 1993, we can calculate the forecast error as the difference between the forecasted value of GNP-PI and the actual value of GNP-PI. Then after several years, the accuracy of the forecasts can be gauged by appropriate summary statistics of the forecast errors.

The model in the Godwins report is not a forecasting model in the same sense as the large-scale commercial econometric models. The model is not designed to forecast the actual level of GNP-PI. Instead it is designed to estimate the *change* in the level of GNP-PI that results from the introduction of SFAS 106. That is, the model is designed to calculate the difference between the actual value of GNP-PI after the introduction of SFAS 106 and the value of GNP-PI that *would have prevailed* if SFAS 106 were not introduced. Even after the fact, when we observe the actual value of GNP-PI in the presence of SFAS 106, we will not be able to assess the accuracy of the model in the standard way. Remember that the model produces an estimate of how much different GNP-PI is as a result of the introduction of SFAS 106. To assess the accuracy of this estimate we would need to know the actual level of GNP-PI after the introduction of SFAS 106 and we would also need to know the value that GNP-PI would have had if SFAS 106 were not introduced. Even after the fact, we cannot observe or directly measure the level that GNP-PI would have taken in the absence of SFAS 106. Thus traditional measures of forecast accuracy cannot be used to assess the accuracy of the model in the Godwins report.

Three additional remarks are in order at this point. First, the model is specifically designed not to be a forecasting model but instead to focus on how much different GNP-PI is as a result of the introduction of SFAS 106. This focus is exactly the question at issue in the Godwins report.

Second, the fact that the model in the Godwins report cannot be evaluated by the traditional measures of forecast accuracy does not mean

that the model cannot be checked against reality. The parameters in the model were calibrated so that the values of labor share of total cost, and the share of employment covered by SFAS 106 produced by the model matched up with actual values of these numbers.

Third, our confidence in the model's numerical results is bolstered by the sensitivity analysis which indicates that our results are quite robust to changes in the values of the model's parameters.

Response to request (5): provide the results of any sensitivity analyses performed to determine the effect of using different assumptions.

As mentioned above, Section IV of the Godwins report, pp. 34-43, is devoted to the sensitivity analysis. In particular, pp. 37-39 specifically discuss the sensitivity analysis of the macroeconomic model. The numerical results of the sensitivity analysis are presented in the table on page 41.